

Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellants: Sophie Creux, *et al.*
Application No.: 10/560,068
Filing Date: June 5, 2006
Group Art Unit: 1782
Confirmation No.: 9849
Examiner: E. Cole
Title: Glass Fibres For Reinforcing Organic And/Or Inorganic
Materials, Composites Enclosing Said Fibres And Used
Compounds

Commissioner for Patents
Mail Stop Appeal Brief - Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

APPELLANTS' REPLY BRIEF UNDER 37 C.F.R. §41.41

In accordance with the provisions of 37 C.F.R. §41.41, Appellants submit the following Reply Brief in response to the Examiner's Answer dated August 3, 2010.

I. STATUS OF CLAIMS

The status of the claims is as follows:

Claims 1-6 and 8-20 are rejected, pending, and appealed.

Claim 7 is canceled.

II. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to be reviewed are as follows:

- (1) Whether the subject matter of claims 1-6 and 8-13 comply with the written description requirement under 35 U.S.C. §112, first paragraph.
- (2) Whether the subject matter of claims 1-6 and 8-13 are indefinite under 35 U.S.C. §112, second paragraph.
- (3) Whether claims 1-6 and 8-20 are anticipated by, or, in the alternative, obvious over U.S. Patent Publication No. 2004/0092379 to Lewis ("Lewis") under 35 U.S.C. §102(a) and (e) and/or 35 U.S.C. §103(a).
- (4) Whether claims 1-6 and 8-20 are properly rejected under the provisional obviousness-type double patenting rejection over co-pending application USSN 11/722,039 to Lecomte ("Lecomte").

III. ARGUMENTS

1. Enablement Rejection under 35 U.S.C. §112, first paragraph and Indefiniteness Rejection under 35 U.S.C. §112, second paragraph

Appellants note that in the Examiner's Answer, the Office has addressed the two §112 outstanding rejections simultaneously. In this regard, Appellants have provided a single set of comments in response to the Office's position.

A. Office's Position

The Office has maintained the rejection of claims 1-6 and 8-12 for failing to comply with the written description requirement and for being indefinite. The Office asserts that the specification does not discuss what trace impurities would be present or the amounts in which they would be present. Specifically, the Office asserts that there is nothing in the statement "the molten glass feeding the bushings is obtained from pure batch materials, or more usually, natural batch materials (*i.e.*, those possibly containing trace impurities)" to establish that lithium oxide is known in the art as being one of the trace impurities in the glass batch or what values of lithium oxide would be considered a trace value. In addition, it is asserted that Appellants have provided no evidence that establishes what values of lithium oxide are considered to be trace impurities. The Office also asserts that there is nothing in the record to establish that the values of 0 to 0.6% that are set forth with respect to titanium oxide are art recognized values for all impurities. Further, the Office asserts that the reference to "impurity" in the specification at page 4 specifically relates to titanium oxide.

B. Appellants' Response

On page 6, lines 5-8 of the specification, Appellants teach that natural glass batch materials from which the molten glass may be obtained possibly contain trace impurities. Although Appellants do not specifically recite that lithium oxide is a trace impurity of the natural glass batch material, one of skill in the art would recognize lithium oxide as potential a trace impurity. Similarly, Appellants submit that one of skill in the art would readily understand what is meant by the term "trace impurity". As taught by the *Manual of Patent Examining Procedure*, "not everything necessary to practice the invention need be disclosed. In fact, what is well-known is best omitted". (See, *e.g. Manual of Patent Examining Procedure*, Patent Publishing, LLC, Eighth Ed., Rev. 7, August 2008, §2164.08 citing *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331 (Fed. Cir. 1991)). Thus, it is respectfully submitted that lithium oxide need not be specifically identified as a trace impurity and that

the term "trace impurity" need not be specifically identified with respect to lithium oxide as these items are easily understood and identified by one of skill in the art. Indeed, Appellants respectfully submit that the term "trace impurity" is an art recognized phrase and is readily understood by those of skill in the art, thereby needing no specific, recited definition within the application.

Notwithstanding the above, Appellants respectfully submit that the term "trace impurity" is, in fact, defined in the application. On page 4, lines 20-23 of the specification, Appellants state that "titanium oxide acts as a viscosity reducer and helps to increase the specific Young's modulus. It may be present as an impurity (its content in the composition is then from 0 to 0.6%) or it may be intentionally added". The Office asserts that the reference to the range 0 to 0.6% refers to the titanium oxide. (*See, e.g.* page 6, lines 15-21 of the Examiner's Answer dated August 3, 2010). Appellants agree, in part, with the Office's interpretation. In particular, Appellants agree that when the titanium oxide is present as a trace impurity, the content of the titanium oxide is from 0 to 0.6%. However, the range 0 to 0.6% is not limited to the titanium oxide.

It is respectfully submitted that the phraseology of the sentence containing the range 0 to 0.6% reads such that an impurity is an amount of material having a range from 0 to 0.6%. For instance, Appellants have placed the phrase "its content in the composition is then from 0 to 0.6%" in parentheses next to the term "impurity", thus defining the 0 to 0.6% range as the range for an "impurity". Moreover, the use of the word "then" implies that if the titanium oxide is present in *an impurity*, it must *then* be present in an amount that an impurity is present, namely, from 0 to 0.6%. Appellants note that if the titanium oxide is present as an impurity, it is *then* present in an amount from 0 to 0.6%, thereby equating the "impurity" with the range 0 to 0.6%.

Appellants thus respectfully submit that the term "impurity" is, in fact, defined on page 4 of the specification as the content of a component in the composition in an amount from 0 to 0.6%, and is not restricted to any particular component, such as titanium dioxide.

2. Anticipation/Obviousness Rejection of Claims 1-6 and 8-20 Over Lewis

A. Office's Position

The Office has maintained the rejection of claims 1-6 and 8-20 as being anticipated by, or in the alternative, obvious over Lewis. The Office asserts that Lewis clearly and

unequivocally teaches that CaO can be present in the composition in an amount from 3 to 15 wt%, which fully encompasses the claimed range. It is further asserted that the end value of Lewis (*i.e.*, 15%) is almost identical to the claimed end point of 14.9%. In addition, the Office asserts that no motivation is required because Lewis anticipates the claimed range. The Office also asserts that Lewis teaches the same fibers and teaches that they can be formed into glass strands or yarns. It is asserted that the fibers of Lewis can be formed into containers having high strength. Additionally, the Office asserts that Lewis teaches the claimed amount of MgO. Further, it is asserted that the reference is useful for all the teachings it contains, not just what is shown in the examples.

B. Appellants' Response

In response to the Office's assertion that Lewis teaches the claimed amount of CaO, Appellants acknowledge that Lewis generally teaches the inclusion of CaO in the composition in an amount from 3.0 to 15%. (*See, e.g.* the Abstract and the Table positioned between paragraphs [0042] and [0043] of Lewis). Appellants respectfully submit that although Lewis discloses a very broad range for CaO, Lewis does not enable the broad range. Indeed, Lewis enables only a small portion of the disclosed range, and that which is enabled is clearly outside of Appellants' claimed range.

As discussed in detail in Appellants' Appeal Brief filed May 21, 2010, *each and every* exemplary embodiment in Lewis contains CaO in an amount much less than Appellants' claimed lower amount of 13%. It is respectfully submitted that in each of the disclosed "exemplary embodiments" of Lewis, CaO is present in the glass composition in an amount less than or equal to 9.61 wt%. (*See, e.g.* Example 4 in paragraph [0034], which contains a maximum amount of 9.61 wt% CaO). Thus, it is respectfully submitted that there can be no reasonable interpretation of the disclosure of Lewis that includes CaO in amounts that overlap Appellants' claimed range of 13 to 14.9% by weight.

A similar argument is respectfully submitted with respect to the claimed amount of MgO. Appellants acknowledge that Lewis teaches a generic composition for glass fibers that includes MgO in an amount from 1.84 to 10.5 wt%. (*See* the Table positioned between paragraphs [0029] and [0030] of Lewis). However, *each and every* Example of Lewis contains an amount of MgO that is less than or equal to 4.71 wt%. (*See* Examples 1-12 set forth in paragraphs [0031]-[0037] and [0047]-[0051] of Lewis). Thus, like the disclosed amount of CaO, Lewis discloses a broad range for MgO, but enables only a small portion,

and that portion which is enabled is clearly outside of Appellants' claimed range. Accordingly, it is respectfully submitted that there can be no reasonable interpretation that the disclosure of Lewis teaches amounts of MgO that overlap Appellants' claimed range of 6 to 12% by weight.

Furthermore, Appellants respectfully submit that to permit one to disclose but only enable a small portion of a very broad range to prevent others from obtaining a patent on an invention outside that enabled range goes against the constitutional purpose of promoting progress in the art.

3. Provisional Obviousness-Type Double Patenting Rejection of Claims 1-6 and 8-20 over Co-Pending Application USSN 11/722,039 to Lecomte ("Lecomte")

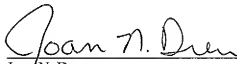
The provisional obviousness-type double patenting rejection of claims 1-6 and 8-20 has been maintained. Appellants respectfully request that this rejection be held in abeyance until the indication of allowable subject matter, upon which time Appellants will consider filing a Terminal Disclaimer.

IV. CONCLUSION

Appellants believe that no additional filing fee is required in conjunction with the filing of this Reply Brief; however, the Commissioner is hereby authorized to charge payment for any fees necessitated by the filing of this Reply Brief, or any other fees necessary to maintain pendency of this application, to Assignee's Deposit Account No. 50-0568.

Respectfully submitted,

Date: 9/30/10


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